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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/567,896

08/16/2006

Clinton Scott Waldock

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DILWORTH & BARRESE, LLP
1000 WOODBURY ROAD
SUITE 405
WOODBURY, NY 11797

EXAMINER

BADR, HAMID R

ART UNIT

PAPER NUMBER

1781

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/567,896	Applicant(s) WALDOCK, CLINTON SCOTT	
	Examiner HAMID R. BADR	Art Unit 1781	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on RCE, 8/10/2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 and 18-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 and 18-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 8/10/2010 has been entered.

1. Claims 1-16 and 18-20 are being considered on the merits.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-16 and 18-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

4. Claim 1 is indefinite for "mixing a bakery dough to make a bakery product". Since ingredients are mixed to prepare a dough before baking it, mixing the dough to make the product is not clear. It is suggested to use 'preparing a bakery dough', should the specification as originally filed allow the incorporation of this phrase.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over McNamee et al. (GB 2,291,578; hereinafter R1) in view of Pasternak (US 4,670,271; hereinafter R2).

3. R1 discloses a method for making baked products. R1 discloses a method for applying an edible marking substance to a portion of the surface of the product prior to baking. (Abstract)

4. R1 discloses that the product is then baked so that a differential surface coloration is developed at the position of and as a consequence of the application of the marking substance. R1 discloses that the marking substance comprises sugar, proteins and aqueous or organic carriers. (page 2 line 27 to page 3 line 4).

5. R1 discloses that the marking substance may be applied to the crust by direct application for example with a brush, or by spraying, by stencil. (End page 3 to top page 4).

6. R1 also discloses that the marking material should be in a liquid form and will comprise sugar, starch or protein or mixtures thereof and the carrier may be aqueous or organic medium, the latter is preferably alcohol. (page 4, lines 15-24)

7. It is noted that the surface of an unbaked dough, as disclosed by R1, comprises hydrophilic materials including starch, protein, sugar, water etc. It is also noted that "beading" as recited in claim 1 is the formation of tiny droplets of ink which prevents the ink to uniformly spread on the dough surface. The "beading" is caused by the high

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surface tension between the ink and the surface to which the ink is applied i.e. dough surface. However, since R1 implicitly recognizes the surface tension phenomenon and discloses that the edible marking material is aqueous or organic material such as ethanol (i.e. low surface tension material miscible with water), then it is obvious that the ink should have low surface tension as recited in amended claim 1.

8. While R1 discloses the marking materials and also methods of applying the marking substances onto the dough surface before baking the product, R1 is silent regarding the edible inks comprising the components as presently claimed.

9. R2 discloses an edible ink to be used for printing on foodstuffs consisting of water (20-60%), glycerol (5-25%), propylene glycol (10-35%), sucrose (1-5%), corn syrup (1-5%), titanium dioxide (5-35%), and food coloring (less than 1%). (Col. 16, lines 40-60).

10. It is also noted that the ranges as disclosed by R2 and as presently claimed overlap. It is also noted that the chemical entities, as disclosed by R2, are basically the entities as presently claimed.

11. R2 discloses examples of food colorings which can be incorporated into the edible ink. FDC yellow no. 5 and FDC red no. 3 are given as examples. (Col. 16, lines 60-61). Given that food colorings can be incorporated into the edible ink, It would be obvious to incorporate the dyes and pigments as presently claimed in the edible ink.

12. While R2 discloses electronic means of applying the ink on the surface of foodstuffs, it would be obvious to use manual stamps, mechanical stamps, stencil spraying, ink jet printer as presently claimed.

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13. Given that R2 teaches of an ink formulation comprising ranges of materials which clearly overlap the presently claimed ranges, it would be obvious to those of skill in the art to change the component ranges depending on the type of the coloring material and the solubility of a specific dye in the carrier system. For the same reason, the chemical entities and their ranges would obviously be manipulated to change the surface tension of the resulting ink depending the end use of the ink. The modification of the base formulation for either increasing or decreasing the surface tension of the resulting ink would then be a matter of optimizing the ingredients as disclosed by R2 and well within the skill of the art.

14. Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to follow the teachings of R1 to apply an edible ink to the surface of a dough before baking and optimize the components of the edible ink, as taught by R2, to create low surface tension inks with minimal ink beading on dough surface as motivated by the aqueous or water soluble organic solvent disclosed by R1. One would do so to be able to apply food coloring of various hues and physical properties, having low surface tension, to the surface of unbaked dough material. Absent any evidence to contrary and based on the teachings of the cited reference, there would be a reasonable expectation of success in formulating an edible ink to be applied to the surface of bakery products.

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15. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over McNamee et al. (GB 2,291,578; hereinafter R1) and Pasternak (US 4,670,271; hereinafter R2), further in view of Errera (US 2004/0040446; hereinafter R3).

16. Disclosures by R1 and R2 are hereby incorporated by reference as applied to claim 1 above.

17. R1 is silent regarding the design of a stamping device for marking baked products.

18. R3 discloses a stamping device with basically similar features as presently claimed. The stamping device is used to mark the surface of food items with specific reference to unbaked doughs.

19. Therefore, it would have been obvious to design a stamping device, as disclosed by R3, to be used in marking the dough before baking as taught by R1.

20. In summary, R1 clearly discloses the concept and method of applying marking materials, of low surface tension, to the surface of unbaked dough. R2 discloses compositions of edible inks having ranges which clearly overlap the claimed ranges. R3 discloses a stamping device with features as presently claimed. Therefore, it would have been obvious to an ordinary skill in the art; to mark the surface of unbaked dough product as disclosed by R1 using the edible ink compositions of R2 while the marking is applied using a device similar to what is disclosed by R3. Absent any evidence to the contrary and based on the combined teachings of the cited references, there would be a reasonable expectation of success to apply an edible ink of low surface tension to the

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surface of unbaked dough so that the baked product is clearly marked with a picture, message, brand name, name, logo, etc.

Response to Arguments

Applicants' arguments have been thoroughly reviewed. These arguments are not deemed persuasive for the following reasons.

1. Applicants argue they have found that by altering the solvent composition, the surface tension of the ink can be lowered, thus an ink with lower surface tension is less likely to form beads when applied to a bakery product.

a. The requirement for a low surface tension marking material for unbaked dough is implicitly disclosed by R1. R1 clearly discloses aqueous marking materials or organic materials such as ethanol for that purpose. Both categories of marking materials have low surface tension, therefore, beading is prevented when applied on the dough surface.

2. Applicants argue that Pasternak does not teach an ink which could be used in combination with the method of McNamee to suggest the claimed invention.

a. Firstly, the ink of Pasternak is an edible ink. Secondly, the ranges of chemical entities as disclosed by Pasternak overlap the chemical entities and ranges as presently claimed. Thirdly, the motivation for modifying the base of Pasternak is given by McNamee because they require the marking material/ink be aqueous or organic of low surface tension such as ethanol. Therefore, it would have been obvious to make an

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edible ink of low surface tension. Please note that the rejection is an obviousness type rejection.

3. Applicants argue that the amendment made to claim 1 requires that the solvent facilitates the low surface tension of the ink to prevent beading and that the propylene glycol of Pasternak has a higher surface tension compared with ethanol, therefore, the ink of Pasternak will not solve the problem of ink beading and bleeding.

a. It should be realized that a low surface tension marking material/ink is implicitly recited by McNamee. McNamee clearly motivates the inclusion of ethanol in the marking material/ink. Ethanol is also disclosed by Pasternak. Therefore, increasing or decreasing an ingredient to change a property of the ink ; i.e. surface tension; would have been obvious. The difference in surface tensions of propylene glycol and ethanol was known in the art, at the time the invention was made, therefore complete or partial substitution of one by the other would have been obvious.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to HAMID R. BADR whose telephone number is (571)270-3455. The examiner can normally be reached on M-F, 8:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Keith Hendricks can be reached on (571) 272-1401. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Hamid R. Badr
Examiner
Art Unit 1781

/Keith D. Hendricks/

Supervisory Patent Examiner, Art Unit 1781